Amendment to the Claims

Kindly amend claims 1, 13, 25 & 26, as set forth below. In compliance with the Revised Amendment Format published in the Official Gazette on February 25, 2003, a complete listing of claims is provided herein. The changes in the amended claims are shown by strikethrough (for deleted matter) and underlining (for added matter).

1. (Currently Amended) A method of updating components in a computing environment, said method comprising:

updating a component of said computing environment which is associated with at least a portion of a unit of work from one version to another version; and

emulating, by said updated component, said one version, while at least one other component of said computing environment associated with said unit of work[[,]] remains at said one version, wherein the updated component processes at least a portion of the unit of work concurrent to the non-updated component processing at least a portion of the unit of work.

2. (Original) The method of claim 1, wherein said component and said at least one other component comprise multiple images of a single program, and said unit of work comprises a single task.

3. (Original) The method of claim 2, wherein said multiple images are in communication with one another.

4. (Original) The method of claim 1, wherein said component and said at least one other component process said unit of work on a plurality of nodes of a distributed computing environment.

5. (Original) The method of claim 1, wherein said updating comprises updating a component identifier of said updated component to correspond to said another version.

6. (Original) The method of claim 5, further comprising:

comparing said component identifier of said updated component with at least one component identifier of said at least one other component to determine whether said updated component and said at least one other component have been updated;

emulating, by said updated component, said one version if any one of said updated component and said at least one other component have not been updated; and

processing said updated component and said at least one other component at said another version if said updated component and said at least one other component have been updated.

7. (Original) The method of claim 1, further comprising:

utilizing a cluster version identifier to represent a lowest running version of said distributed computing environment; and

emulating, by said updated component, said lowest running version when any one of said component and said at least one other component have not been updated to said one version.

8. (Original) The method of claim 7, further comprising updating said cluster version identifier, to correspond to said one version, when said component and said at least one other component have been updated to said one version.

9. (Original) The method of claim 8, wherein said older version comprises said one version.

10. (Original) The method of claim 8, wherein said older version comprises an intermediate version.

11. (Original) The method of claim 10, further comprising emulating, by said backed-out component, said one version.

12. (Original) The method of claim 1, wherein said updating comprises updating a plurality of components of said computing environment.

13. (Currently Amended) A system for updating components in a computing environment, said system comprising:

means for updating a component of said computing environment which is associated with at least a portion of a unit of work from one version to another version; and

means for emulating, by said updated component, said one version, while at least one other component of said computing environment associated with said unit of work[[,]] remains at said one version, wherein the updated component processes at least a portion of the unit of work concurrent to the non-updated component processing at least a portion of the unit of work.

14. (Original) The system of claim 13, wherein said component and said at least one other component comprise multiple images of a single program, and said unit of work comprises a single task.

15. (Original) The system of claim 14, wherein said multiple images are in communication with one another.

16. (Original) The system of claim 13, wherein said component and said at least one other component process said unit of work on a plurality of nodes of a distributed computing environment.

17. (Original) The system of claim 13, wherein said means for updating comprises means for updating a component identifier of said updated component to correspond to said another version.

18. (Original) The system of claim 17, further comprising:

means for comparing said component identifier of said updated component with at least one component identifier of said at least one other component to determine whether said updated component and said at least one other component have been updated;

means for emulating, by said updated component, said one version if any one of said updated component and said at least one other component have not been updated; and

means for processing said updated component and said at least one other component at said another version if said updated component and said at least one other component have been updated.

19. (Original) The system of claim 13, further comprising means for backing said updated component out of said another version to an older version.

20. (Original) The system of claim 19, wherein said means for backing out comprises means for updating a component version identifier of said backed out component to correspond with said older version.

21. (Original) The system of claim 15, further comprising:

means for utilizing a cluster version identifier to represent a lowest running version of said distributed computing environment; and

means for emulating, by said updated component, said lowest running version when any one of said component and said at least one other component have not been updated to said one version.

22. (Original) The system of claim 21, further comprising means for updating said cluster version identifier, to correspond to said one version, when said component and said at least one other component have been updated to said one version.

23. (Original) The system of claim 22, further comprising means for emulating, by said backed-out component, said one version.

24. (Original) The system of claim 13, wherein said means for updating comprises means for updating a plurality of components of said computing environment.

25. (Currently Amended) A system for updating components in a computing environment, said system comprising:

a computing node adapted to update a component of said computing environment which is associated with at least a portion of a unit of work from one version to another version; and

said computing node being further adapted to emulate, by said updated component, said one version, while at least one other component of said computing environment associated with said unit of work[[,]] remains at said one version, wherein the updated component processes at least a portion of the unit of work concurrent to the non-updated component processing at least a portion of the unit of work.

26. (Currently Amended) An article of manufacture, comprising:

at least one computer usable medium having computer readable program code means embodied therein for causing the updating of components in a computing environment, the computer readable program code means in said article of manufacture comprising:

computer readable program code means for updating a component of said computing environment which is associated with at least a portion of a unit of work from one version to another version; and

computer readable program code means for emulating, by said updated component, said one version, while at least one other component of said computing environment associated with said unit of work[[,]] remains at said one version, wherein the updated component processes at least a portion of the unit of

work concurrent to the non-updated component processing at least a portion of the unit of work..

27. (Original) The article of manufacture of claim 26, wherein said component and said at least one other component comprise multiple images of a single program, and said unit of work comprises a single task.

28. (Original) The article of manufacture of claim 27, wherein said multiple images are in communication with one another.

29. (Original) The article of manufacture of claim 26, wherein said component and said at least one other component process said unit of work on a plurality of nodes of a distributed computing environment.

30. (Original) The article of manufacture of claim 26, wherein said computer readable program code means for updating comprises computer readable program code means for updating a component identifier of said updated component to correspond to said another version.

31. (Original) The article of manufacture of claim 30, further comprising:

computer readable program code means for comparing said component identifier of said updated component with at least one component identifier of said at least one other component to determine whether said updated component and said at least one other component have been updated;

computer readable program code means for emulating, by said updated component, said one version if any one of said updated component and said at least one other component have not been updated; and

computer readable program code means for processing said updated component and said at least one other component at said another version if said updated component and said at least one other component have been updated.

32. (Original) The article of manufacture of claim 26, further comprising computer readable program code means for backing said updated component out of said another version to an older version.

33. (Original) The article of manufacture of claim 32, wherein said computer readable program code means for backing out comprises computer readable program code means for updating a component version identifier of said backed out component to correspond with said older version.

34. (Original) The article of manufacture of claim 32, wherein said older version comprises said one version.

35. (Original) The article of manufacture of claim 32, wherein said older version comprises an intermediate version.

36. (Original) The article of manufacture of claim 30, further comprising:

computer readable program code means for utilizing a cluster version identifier to represent a lowest running version of said distributed computing environment; and

computer readable program code means for emulating, by said updated component, said lowest running version when any one of said component and said at least one other component have not been updated to said one version.

37. (Original) The article of manufacture of claim 36, further comprising computer readable program code means for updating said cluster version identifier, to correspond to said one version, when said component and said at least one other component have been updated to said one version.

38. (Original) The article of manufacture of claim 30, further comprising computer readable program code means for backing said updated component out of said another version to an older version.

39. (Original) The article of manufacture of claim 38, wherein said computer readable program code means for backing out comprises computer readable program code means for updating a component version identifier of said backed out component to correspond with said older version.

40. (Original) The article of manufacture of claim 38, wherein said older version comprises said one version.

41. (Original) The article of manufacture of claim 38, wherein said older version comprises an intermediate version.

42. (Original) The article of manufacture of claim 41, further comprising computer readable program code means for emulating, by said backed-out component, said one version.

43. (Original) The article of manufacture of claim 30, wherein said computer readable program code means for updating comprises computer readable program code means for updating a plurality of components of said computing environment.